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Network Protection Sciences, LLC

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

NETWORK PROTECTION SCIENCES,
LLC

Plaintiff,

vs.

FORTINET, INC.

Defendants.

No. 3:12-CV-01106-WHA

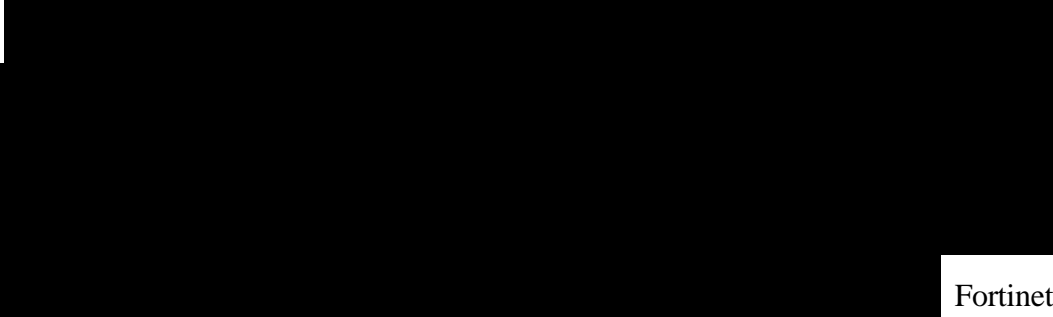
**PLAINTIFF NETWORK
PROTECTION SCIENCES, LLC'S
OPPOSITION TO DEFENDANT
FORTINET, INC.'S MOTION FOR
SUMMARY JUDGMENT OF NON-
INFRINGEMENT**

To Be Heard:
September 5, 2013 at 8:00 am

PLAINTIFF NETWORK PROTECTION SCIENCES, LLC'S OPPOSITION TO DEFENDANT
FORTINET, INC.'S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT.
Case No. 3:12-CV-01106 -WHA

1 Plaintiff Network Protection Sciences, LLC, by its undersigned counsel, hereby
 2 submits this opposition to Defendant Fortinet, Inc.'s ("Fortinet") motion for summary
 3 judgment of non-infringement (the "Motion").
 4

I. INTRODUCTION

5 Fortinet, in its Motion, seeks summary judgment on four separate issues and only one
 6 actually delves into the merits of this case. Since the beginning of this dispute, Fortinet has
 7 spared no expense turning over every rock in search of invalidity and non-infringement
 8 defenses. Fortinet first sought refuge through reexamination to invalidate the claims based on
 9 the same prior art that it relies upon today. After failing in that attempt (in which the USPTO
 10 affirmed the patentability of all the claims) Fortinet has chosen procedural horse wrangling
 11 over addressing the merits of infringement, while employing questionable tactics. For
 12 example,  Fortinet

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 17 even convinced a customer to first send its document production to Fortinet. Fortinet then
 18 parsed through it, electronically modified it, and deliberately delayed its production to
 19 prejudice NPS' ability to conduct its expert discovery.
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21 And, despite all of its efforts, Fortinet asserts that it is entitled to summary judgment
 22 based on false premises that: 1) NPS' infringement claims and evidence are only directed
 23 FortiOS v. 4.0, 2) NPS has not produced evidence that Fortinet's customers are using the
 24 Accused Products in an infringing manner, and 3) NPS' expert Dr. Keromytis does not show
 25 that the Accused Products comprise the structures recited in claim 29. To make this assertion,
 26 Fortinet ignores Dr. Keromytis' analysis, and the testimony of its own witnesses, showing that
 27 all versions of Fortinet's products infringe the '601 patent. Fortinet's proffered expert Mr.
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1 Hicks does not dispute Dr. Keromytis technical analysis of these versions. Fortinet also
2 ignores the direct and circumstantial evidence proving that at least half of Fortinet's
3 customers are using the accused products in an infringing manner. Fortinet's motion also
4 literally deletes all of the documentary evidence, witness testimony and source code that Dr.
5 Keromytis identifies as showing that each of the structures recited in claim 29 are present in
6 the Accused Products.
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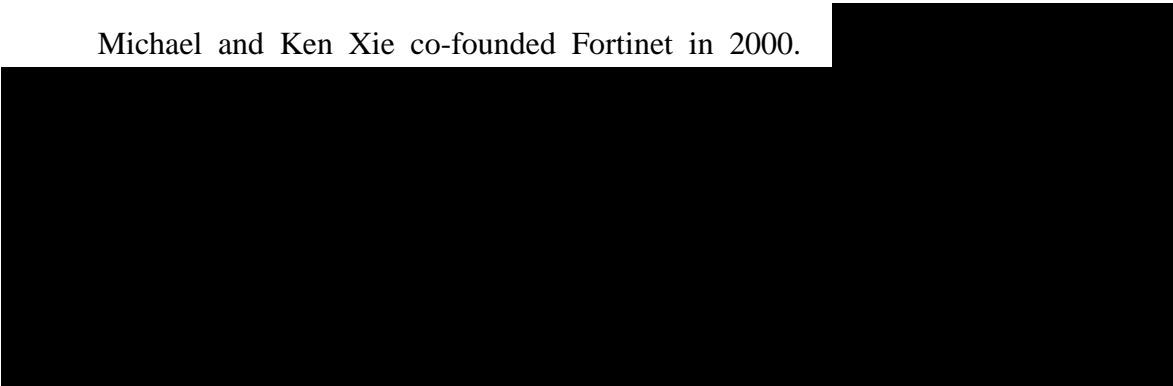
8 Fortinet's only defense that touches any substance of an issue in this matter is its
9 claim that the accused products do not have a modified kernel that does not forward
10 communications packets. The problem with this claim is that it is not supported by any
11 evidence. In fact, Fortinet cites to *no* admissible evidence from documents or testimony to
12 support its claim that there is no issue of material fact. The only thing that Fortinet has
13 filed is an expert report, which is not admissible evidence. Fortinet's motion has provided
14 no evidence demonstrating that it is entitled to summary judgment.

15 Fortinet's motion should also be denied because, as explained in Dr. Keromytis'
16 declaration, Fortinet's products do employ a modified kernel and that kernel by design
17 does not forward communications packets, just like the Black Hole product Michael Xie
18 worked on while an employee at Milkyway.

19 **II. BACKGROUND**

20 **A. Fortinet and the Xie Brothers**

21 Michael and Ken Xie co-founded Fortinet in 2000.



27 ¹ In fact, the '601 patent was drafted to describe Milkyway's Black Hole product.
28 (Kopeikin Dec. Exh. 25).

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B. Accused Products

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² Fortinet's expert, Mr. Hicks does not dispute that:

[REDACTED]

III. ARGUMENT

For Fortinet to succeed on summary judgment, it must show, after all inferences have been drawn in NPS' favor, that there are no issues of material fact. *See Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 412 F.3d 1331, 1336, 1338 (Fed. Cir. 2005); Fed. R. Civ. P. 56(c). In doing so, Fortinet "bears the burden of demonstrating to the court that there is an absence of evidence to support NPS' infringement case." *Rombeiro v. Unum Life Ins. Co. of Am.*, 761 F. Supp. 2d 862, 866 (N.D. Cal. 2010) (citation omitted). "Summary judgment may be resisted and *must be denied* on no other grounds than that the movant has failed to meet its burden of demonstrating the absence of triable issues." *Henry v. Gill Industries, Inc.* 983 F.2d 943, 950 (9th Cir. Ariz. 1993) (emphasis added). If Fortinet does meet its initial burden, then NPS must identify admissible evidence that shows that there is a genuine issue of material fact for trial. *Johnson, et al. v. Hewlett-Packard Co.*, 809

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1 F.Supp.2d 1114, 1127 (N.D. Cal. Aug. 12, 2011).

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3 **A. All Fortinet Firewall Products With Transparent Application Layer
Proxies, Regardless Of FortiOS Version, Infringe The ‘601 Patent**

4 Fortinet moves for partial summary judgment on the grounds that NPS’
5 infringement theory should be limited to only those products that employ the FortiOS 4.0
6 MR2 because NPS’ claim chart “cited exclusively to evidence regarding FortiOS 4.0 MR2
7 and no other versions of FortiOS.”³ ECF No. 230 at 17, ll. 6-12. To support its position,
8 Fortinet grossly misrepresents the evidence presented by NPS in this case and goes so far
9 to say that: “There is none.” ECF No. 230 at 16. Furthermore, Fortinet cites to no legal
10 authority to support its position.⁴ Considering all the evidence and controlling legal
11 precedence, Fortinet cannot meet its burden of showing lack of evidence regarding other
12 FortiOS versions and its motion should be denied. NPS has adduced evidence that
13 presents a genuine issue of material fact as to whether all of Fortinet’s FortiOS operating
14 system have been properly alleged to infringe.

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16 **1. Fortinet Admits That Evidence Regarding Other FortiOS
Versions Has Been Presented**

17 Fortinet describes the evolution of NPS’ infringement allegations from complaint
18 through expert discovery. *See* ECF No. 230 at 10-11. It notes that the claim chart attached
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21 ³ Fortinet also implies that, in addition to providing claim charts for every version of
22 FortiOS alleged to infringe, NPS is required to provide infringement chart for every
product that employs the FortiOS operating system. This clearly is not required by law.

23 ⁴ Fortinet cites to the Local Patent Rules and one case regarding general infringement
24 principles. It provides no authority on how the Local Patent Rules are interpreted or what
courts find to be sufficient or deficient. Instead, it proffers nothing more than conclusory
attorney argument.

25 Fortinet’s assertion also misrepresents NPS’ infringement positions, which identifies
26 Fortinet firewall products with transparent application layer proxies that existed prior to
Version 4.0 as infringing. (*See* AK Dec. ¶20, ECF No. 230-13-16). Fortinet also identified
27 these products in response to NPS’ interrogatories. Dr. Keromytis’ infringement analysis
28 determines that each of the products identified in Fortinet’s interrogatory responses are
infringing.

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to NPS' Initial Contentions "cited evidence exclusively regarding the design and operation of 'FortiOS 4.0 MR2.'" *Id.* It stated the same in regard to NPS' amended infringement contentions. *Id.* at 11. These assertions are a gross misrepresentations of NPS' infringement contentions, which:

- provided an extensive list of products that were accused of infringement, not just FortiOS v. 4.0 products, (*See* ECF No. 230-3 at 2-3; *id.*, Exhibit B)
- stated that its contentions apply to any Fortinet product that implements "a transparent application layer IP proxy server"; (*See* ECF No. 230-3 at 3).
- stated that the evidence relied on was "exemplary and not exhaustive." (*See* ECF No. 230-3 at 3; *id.*, Exhibit A at 1.)

In contrast, in its description of the evidence submitted by NPS' expert Fortinet admits that evidence for other versions of FortiOS was presented. For example, Fortinet states that "NPS focused *almost* exclusively on FortiOS 4.0 MR2" and that "NPS' expert provided a claim chart with citations either to (i) FortiOS 4.0 MR2, or (ii) *documents about unspecified versions of FortiOS.*" *Id.* (emphasis added). Such statements contradict its bolded assertion that "There is none." Based on this alone, the Court should deny Fortinet's request to narrow NPS' infringement case. *Henry*, 983 F.2d at 950 ("Summary judgment may be resisted and *must be denied* on no other grounds than that the movant has failed to meet its burden of demonstrating the absence of triable issues." (emphasis added)).

2. The Law Does Not Require Claim Chart For Every Product/Version

Fortinet erroneously argues that NPS should not be permitted to

proceed with infringement theories against any versions of FortiOS other than FortiOS 4.0 MR2 because NPS has failed to satisfy its burden to show infringement by any such operating systems, let alone devices or applications running on or sold with any such operating

1 systems. D.I. 230 at 11.

2 Fortinet's argument mischaracterizes NPS infringement contentions and misreads the
3 requirements under Local Patent Rule 3.1.

4 NPS adequately set forth both the asserted claims and its specific theories of
5 infringement in the infringement contentions. (See AK Dec. at AK Report ¶119, ECF No.
6 235-1-5). "The overriding principle of the Patent Local Rules is that they are designed [to]
7 make the parties more efficient, to streamline the litigation process, and to articulate with
8 specificity the claims and theory of a plaintiff's infringement claims." *Implicit Networks*
9 *Inc. v. Hewlett-Packard Co.*, No. C 10-03746 SI, 2011 U.S. Dist. LEXIS 100283, 4 (N.D.
10 Cal. Sept. 7, 2011). Patent Local Rule 3-1 "takes the place of 'a series of interrogatories
11 that defendants would have likely propounded had the patent local rules not provided for
12 streamlined discovery.'" *Intertrust Techs. Corp. v. Microsoft Corp.*, No. C 01-1640 SBA,
13 2003 U.S. Dist. LEXIS 22736, at *3-*4 (N.D. Cal. Nov. 26, 2003) (quoting *Network*
14 *Caching Tech., LLC v. Novell, Inc.*, 2002 U.S. Dist. LEXIS 26098, at *12 (N.D. Cal.
15 2002). The Rules do not require the disclosure of specific evidence nor do they require the
16 plaintiff to prove its infringement case. *Solannex, Inc. v. Miasole, Inc.*, No. 11-CV-00171-
17 PSG, 2013 U.S. Dist. LEXIS 56672, at *7 (N.D. Cal. April 18, 2013); *Creagri, Inc. v.*
18 *PinnacLife Inc.*, No. 11-cv-06635-LHK-PSG, 2012 U.S. Dist. LEXIS 158540, at *6 (N.D.
19 Cal Nov. 2, 2012).

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21 Fortinet's arguments based on Patent Local Rule 3-1 should be given little weight.
22 NPS has provided substantial evidence in support of its infringement position and put
23 Fortinet on notice of its infringement theories. And, contrary to Fortinet's portrayal, NPS'
24 infringement position has not wavered. (See AK Dec. ¶10).

Document	NPS' Infringement Position
Complaint	"product families that include a transparent IP proxy server such as, without limitation, the FortiGate products." ECF No. 1 at 4.
Preliminary Infringement	"product families that employ the FortiOS platform and are configurable, and have been configured, to implement a transparent

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Contentions	application layer IP proxy server including but not limited to the FortiGate product families” ECF No. 230-2 at 9.
Updated Infringement Contentions	“product families . . . that employ the FortiOS platform and are configurable, and have been configured, to implement a transparent application layer IP proxy server ” ECF No. 230-3 at 3.
Keromytis Infringement Report	“Fortinet’s products that provide firewall services with transparent application layer proxies ” ECF 230-4, ¶ 72.

(emphasis added).

Furthermore, NPS’ claim charts based FortiOS 4.0 MR2 are representative of all other FortiOS versions and the devices that employ FortiOS. (AK Dec. ¶¶19-23, ECF Nos. 230-2, 230-3, 230-13-16); *See Implicit Networks, Inc.*, 2011 U.S. Dist. LEXIS 100283, *4-*9. (Finding plaintiff’s single claim chart covering over 120 accused products sufficient under Patent Local Rules 301(c)); *Infineon Techs. AG*, 2013 U.S. Dist. LEXIS 109165 at *15-*18 (plaintiff’s claim chart of a single product, in conjunction with analysis supporting its contention was representative of the other accused products and deemed adequately representative); *Creagri, Inc.*, 2012 U.S. Dist. LEXIS 158540, at *10 (finding that contention on one hydroxytyrosol product sufficient to put defendants on notice for each product). Here, NPS’ claim chart shows how Fortinet’s products meet every limitation of the asserted claims, including citations to the source code Fortinet produced. (*See* ECF No. 23-13-16). FortiOS 4.0 MR2 is representative of the other FortiOS versions that contain the same functionality, employed in the alleged infringing Fortinet products during the relevant time period. Fortinet’s only substantive argument is that it “sold . . . different versions of FortiOS” (ECF No. 230 at 12) but provides no specific argument, much less evidence, that any other FortiOS version actually functions in a different manner.⁵ Fortinet’s conclusory statement that they are “different,” without more, neither meets its

⁵ Fortinet does not argue that other FortiOS version do not infringe, only that NPS has not provided any evidence of infringement. It is clear that NPS has presented such evidence and anticipates Fortinet to attempt to identify how the other FortiOS versions are different to support its non-infringement position. Such arguments are improper as they will be raised for the first time in Fortinet’s reply. The Court should disregard such arguments.

1 burden to show an absence of evidence of infringement regarding other FortiOS versions
2 nor support its non-infringement position. *See Infineon Techs. AG v. Volterra*
3 *Semiconductor*, C-11-06239 MMC (DMR), 2013 U.S. Dist. LEXIS 109165, at *17 (N.D.
4 Cal. July 8, 2013) (“The existence of product differences does not necessarily affect the
5 question of whether a product is representative of others. The differences must be relevant
6 to the infringement contentions.”)

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8 As noted above, Fortinet has been on notice since the beginning of this case that all
9 Fortinet products that employ transparent application layer proxies are accused of
10 infringement. Fortinet has been selling these products since 2002. Fortinet provided the
11 source code that it represented was relevant to NPS’ infringement claims and Dr.
12 Keromytis analyzed that code. Dr. Keromytis identified by bates number the code
13 illustrating that Fortinet’s products satisfy each and every elements of the claims. (AK
14 Dec. ¶ 19, Keromytis Dep. Tr. 118:17-119:20). Based on his analysis of all of the versions
15 produced, Dr. Keromytis confirmed his opinion that all of these products infringe the ‘601
16 patent.

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25 (Keromytis Dep. Tr. p. 145:23-146:1; 146:14-147:1).

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3. NPS Has Provided Evidence To Show That All Fortinet Firewall Products With Transparent Application Layer Proxies, Regardless of FortiOS Version, Are Within Its Infringement Theory

NPS, contrary to Fortinet's assertions, has presented evidence that all Fortinet Firewall Products with transparent application layer proxies, regardless of FortiOS versions, meet each limitation of the asserted claims. NPS has analyzed every version of FortiOS for which Fortinet has provided discovery, (AK Decl. ¶19), analyzed Fortinet's documentary evidence describing the operation of the Accused Products, and examined Fortinet's Rule 30(b)(6) witness on the operation of the Accused Products from 2002 until the present.

[REDACTED]

6 [REDACTED]

1 Dr. Keromytis, relying on all of this relevant evidence, concluded that all of
2 Fortinet's firewall products with transparent application layer proxies infringe the '601
3 patent. [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]

Simply put, Dr.
14 Keromytis' analysis of the operation of all of the Accused Products from 2002 - present is
15 not disputed.

16 Instead of identifying an actual product or FortiOS version that does not operate in
17 the manner identified by Dr. Keromytis or as described by Fortinet's own documents and
18 witnesses, Fortinet simply concludes no evidence was provided. [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]

All
23 versions of the code literally infringe all of the elements of the asserted claims. *Id.*

24 As shown, NPS has presented evidence, in the form of Fortinet's own internal
25 documents, Rule 30(b)(6) deposition testimony, expert declaration, and FortiOS source
26 code. Not only does such evidence create a genuine issue of material fact, but
27 convincingly shows that all versions of FortiOS, from at least 2002, meet each limitation in
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1 the asserted claims. Furthermore, such evidence shows that Fortinet products that employ
2 those versions of FortiOS also infringe.⁷

3 **B. Structure/Function/Algorithm**

4 Fortinet claims that it is entitled to summary judgment for non-infringement of
5 claim 29 because NPS has not properly alleged infringement pursuant to §112, ¶6.
6 Specifically, Fortinet argues that NPS has failed to (i) identify the structure for the
7 functions claimed in means-plus-function format in the '601 patent, (ii) identify the
8 structures in the alleged infringing products, and (iii) did not perform a structure-to-
9 structure comparison. Fortinet is wrong.

10
11 First, Fortinet incorrectly suggests that there is material distinction between the
12 parties' construction of these terms. The parties exchanged constructions for these means-
13 plus-function claim terms and essentially identified equivalent structures. The parties did
14 not identify any of these means limitations as claim terms that needed to be construed by
15 the Court. Dr. Keromytis' analysis simply applies the construction that all parties
16 effectively agreed to early on in this case. A chart comparing the parties' constructions can
17 be found at AK Decl. ¶61.⁸

18 Claim 29 is a means-plus-function claims and is directed to "[a] computer system
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20 ⁷ Fortinet cannot introduce new allegations supposedly supporting the Motion in its reply
21 brief, to which NPS would have no opportunity to respond. As movant, Fortinet bears the
22 burden on its motion for summary judgment. *See Rombeiro*, 761 F. Supp. at 866. For
23 example, Fortinet has provided no specific argument, much less evidence that any of the
24 other FortiOS versions actually function in a different manor. To the extent Fortinet
attempts to backfill the deficiencies of its moving papers, NPS respectfully requests that
the Court strike and not consider "new" arguments.

25 ⁸ Fortinet through its expert Mr. Hicks is also trying to improperly raise a new claim
26 construction that contradicts what the parties essentially agreed to. The rules of this
27 District and this Court's order required Fortinet to provide its proposed constructions for
28 these terms last year, along with an identification of any extrinsic to support that
construction. Not only is Fortinet violating this order by trying to assert new
constructions, but seeks to improperly introduce new extrinsic evidence that was never
previously identified under the local rules, namely the opinion testimony of Mr. Hicks.

1 for providing a secure gateway between a private network and a potentially hostile
 2 network.” (‘601 patent at 18:61-62). A firewall is a secure gateway between a private
 3 (“protected”) and a potentially hostile network, such as the internet. (See AK Decl at AK
 4 Report Ex. J at 76, ECF No. 235-8-13). Fortinet manufactures products alleged to infringe
 5 that ‘601 patent that act as firewalls. (See AK Dec. ¶12).

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 7 For each claim limitation, Dr. Keromytis provides citations to the ‘601 patent
 8 specification identifying the corresponding structure of the claimed invention. These
 9 disclosures are identical to NPS’ preliminary claim constructions and comply with the
 10 requirements of §112, ¶6. (See AK Decl. ¶61).⁹ An algorithm may be expressed "in any
 11 understandable terms including as a mathematical formula, in prose, or as a flow chart, or
 12 in any other manner that provides sufficient structure." *Typhoon Touch*, 659 F.3d at 1385
 13 (quoting *Finisar Corp. v. DirectTV Grp., Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008)). Even
 14 described "in prose," an algorithm is still "a step-by-step procedure for accomplishing a
 15 given result." *Id.* at 1385 (quoting *In re Freeman*, 573 F.2d 1237, 1245-46 (CCPA 1978)).
 16 *Ergo Licensing, LLC et al. v. Carefusion 303, Inc.*, 673 F.3d 1361, (Fed. Cir. 2012).

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 27 ⁹ Fortinet did not raise any issue with the sufficiency of NPS’ preliminary constructions
 28 then, yet now, almost a year later, Fortinet raises for the first time that NPS’ construction
 of the means-plus-function claim does not identify sufficient structure.

1 In fact, these functions and structures are not materially different from the
 2 structures and functions identified by Fortinet in its proposed constructions. (See AK Dec.
 3 ¶61). Further, Fortinet never raised the construction of these means-plus-function terms as
 4 an issue that needed to be addressed by the Court.¹⁰

5 In regard to the structure in the accused product, NPS' expert identifies the
 6 presence of the infringing structures through Fortinet's documentation, deposition
 7 testimony, and actual source code.

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 19 Clearly NPS has provided infringement
 20 positions that comply with §112, ¶6 and, at a minimum, show that a genuine issue of a
 21 material fact exists as to whether Fortinet's products infringe claim 29. Fortinet's motion
 22 should be denied.

23 Also, in order to support its argument, Fortinet completely ignores all of the
 24 documentary evidence, witness testimony, and source code that Dr. Keromytis cites to

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 26
 27 ¹⁰ Despite Fortinet's admission about the meaning of these terms, Mr. Hicks in the
 28 eleventh hour tries to offer an opinion on a different constructions of these terms. Since
 these constructions are contrary to Fortinet's prior admissions and are incorrect as a matter
 of law, they should be disregarded by the Court.

1 support his conclusion that the Accused Products have the structures disclosed in the patent
 2 and required by the claims. (*See* AK Decl. at AK Report Exh. J at 79-102, ECF No. 235-8-
 3 13). Fortinet goes so far as to remove that analysis from Dr. Keromytis' claim chart. And
 4 again, Fortinet provides no specific argument, much less any evidence, that the cited
 5 evidence does not demonstrate that the Accused Products have each and every element of
 6 claim 29.

8 C. FORTINET'S CUSTOMERS PRACTICE THE METHODS

9 Fortinet again ignores all of the evidence put forth by NPS establishing that
 10 customers use Fortinet's products in a manor that infringes the '601 patent. Fortinet
 11 applies the wrong evidentiary requirement, ignores the substantive configuration data
 12 identified, ignores the deposition testimony provided by one of its corporate officers, and
 13 ignores its own user manuals and other technical documents instructing its customers how
 14 to use its firewall products in an infringing manor. Such facts, particularly when construed
 15 in favor of the non-moving party, clearly show that there is a genuine issue of material fact
 16 regarding NPS' allegation of indirect infringement.

17 Here, Fortinet argues that for NPS to show the Fortinet customers directly infringe
 18 the asserted method claims of the '601 patent, it has to show a specific instance of direct
 19 infringement.¹¹ Fortinet claims that the evidence must show that at least one person
 20 purchased an accused device, installed it, configured it to practice all the steps of claims 10
 21 and 43, and then *actually performed* each and every claimed step. *Id.* at 19 (emphasis
 22 added). And, to show actual performance, Fortinet requires direct evidence such as
 23 firewall logs, router logs, and/or configuration files. *See id.* at 22.

24 However, "direct infringement can be proven by circumstantial evidence." *Toshiba*

26 ¹¹ To be correct, to show direct infringement requires the showing of either a specific
 27 instance of direct infringement or a showing that the accused device necessarily infringes.
 28 *Convolve, Inc. et al. v. Compaq Computer Corp. et al.*, 2012-1074, 2013 WL 3285331
 (Fed. Cir. July 31, 2013).

1 *Corp. v. Imation Corp. et al.*, 681 F.3d 1358, 1364 (Fed. Cir. 2012) (citing *Moleculon*
 2 *Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1272 (Fed. Cir. 1986); see also *Lucent Techs.*
 3 *Guardian I LLC et al. v. Gateway, Inc. et al.*, 580 F.3d 1301, 1318 (Fed. Cir. 2009)
 4 (“[C]ircumstantial evidence was just adequate to permit a jury to find that at least one other
 5 person within the United States during the relevant time period, other than the expert, had
 6 performed the claimed method.”). Circumstantial evidence can include sales of the alleged
 7 infringing product and instruction manuals. *Lucent Techs.*, 580 F.3d at 1318. Here, NPS
 8 has presented both direct and circumstantial evidence showing that at least one Fortinet
 9 customer has performed all of the steps of claims 10 and 43.

11 1. NPS Did Identify Customer Configuration Files

12 [REDACTED]
 13 [REDACTED]
 14 [REDACTED]
 15 That is exactly what NPS did. NPS subpoenaed some of Fortinet’s customers asking for
 16 “[d]ocuments showing the configurations of Fortinet firewalls **executing** FortiOS and
 17 security gateways **executing** FortiOS between 2004 to present.” (See e.g., Kopeikin Dec.
 18 Exh. 12 at 4 (emphasis added)). NPS did not ask for any configurations; NPS asked for the
 19 configurations being executed in that customers’ use of Fortinet’s products. In response,
 20 NPS received configuration files of the customers Fortinet firewall executing FortiOS.

Fortinet tries to refute this evidence by arguing that configuration data is not sufficient evidence. ECF No. 230, n. 3. It argues that configuration data can only show how the device was configured, not whether it was actually used. *Id.* First, this argument shows the lack of merit in Fortinet's argument. If Fortinet really believed that NPS did not provide any configuration data to support its infringement claim, then why include this footnote. In reality, Fortinet is fully aware of NPS' infringement position and its reliance on Fortinet's customers' configuration files to support that position. Yet Fortinet still sought summary judgment with this baseless claim.

Fortinet cites to its expert report to support this fact statement. There are numerous issues with that. First, Fortinet must produce actual admissible evidence from documents or testimony to support this asserted fact. Fortinet does neither and an unsworn expert report is not admissible evidence. *See Smith v. City of Oakland*, Case No. 05-4045, 2007 WL 2288328, at *9-10 (N.D. Cal. Aug. 9, 2007). Second, Mr. Hicks has no practical experience in network security and since graduating from college has only served as a litigation technical consultant.

¹² In furtherance of its efforts to engage in litigation by ambush, Fortinet interfered with NPS' efforts to obtain discovery on Fortinet's customers' configuration files. On the last day of discovery in this case counsel for Fortinet produced over

This provides further evidence that Fortinet's customers are performing the claimed methods and using the claimed application layer proxies.

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1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED] Hicks' expert report cannot be relied upon to support this factual
16 proposition and Fortinet cites no other authority.

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18 **2. NPS Has Provided Substantial Evidence demonstrating How**
19 **Fortinet's Customers Directly Infringe Claims 10 and 43**

20 NPS also cited to deposition testimony and Fortinet advertising, marketing,
21 technical documents, and user manuals as further evidence that Fortinet's customers
22 infringe the asserted '601 method claims. [REDACTED]
23 [REDACTED]

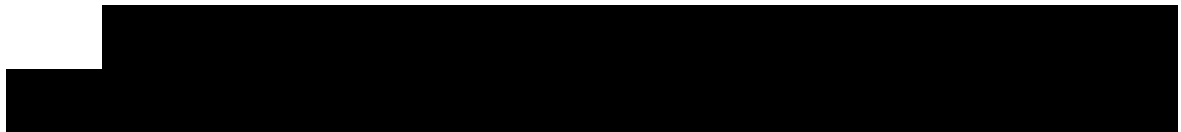
24 ¹³ Fortinet also misleadingly refers to the Hicks report as the "Infringement Report." ECF
25 230, n. 3. [REDACTED]
26 [REDACTED]

27 ¹⁴ [REDACTED]
28 [REDACTED]



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13 Additionally, Fortinet instructs and encourages users to employ policies with
14 transparent application layer proxies. (*See* AK Dec. ¶¶31-32). Fortinet’s users manuals
15 provide users with step by step instructions on how to configure the Accused Products to
16 employ these proxies. *Id.* In fact, Fortinet has explicitly told its customers that they are
17 using transparent application layer proxies with these services. *Id.* Fortinet also warns
18 users that without these transparent application layer proxies their systems are in danger.
19 *Id.* Fortinet tells users that “[p]roxy firewalls provide the advantages of restricting
20 information flows at the application level and the benefit of better security by not allowing
21 end points to establish direct connections.” *Id.* Fortinet also tells its users that the greatest
22 threats are content-level threats, not network-level threats, and that content-level threats
23 provide a greater threat of damages. *Id.* Fortinet also informs customers that application
24 proxies are necessary to provide complete content protection to their systems. *Id.*



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¹⁵ “UTM” stands for unified threat management.

D. A Material Question Of Fact Exists As To Whether Fortinet Infringes Claims 19 and 57

Fortinet moves for summary judgment of non-infringement of claims 19 and 57 on the basis that the FortiOS kernel is not modified to disable communication packet forwarding. ECF No. 230 at 22.

As an initial matter, Fortinet's motion should be dismissed out of hand because it does not rely on any admissible evidence from documents or testimony to support its claim that there is no issue of material fact. The only thing that Fortinet has filed is an expert report, which is not admissible evidence. *Smith v. City of Oakland*, Case No. 05-4045, 2007 WL 2288328, at *9-10 (N.D. Cal. Aug. 9, 2007) (“[u]nsworn expert reports prepared in compliance with Rule 26(a)(2) do not qualify as affidavits or otherwise admissible evidence for purpose of Rule 56, and may be disregarded by the court when ruling on a motion for summary judgment.”) Fortinet's motion has provided no evidence demonstrating that it is entitled to summary judgment.

Further, to support its position, Fortinet takes an untenable claim construction position and improperly reads limitations from the specification into the claim terms. Applying the correct claim construction and evaluating all available evidence, the only conclusion is that, at a minimum, a genuine issue of material fact exists.

1. Construction of “Modified”

Claims 19 and 57 include the limitation of:

an operating system executable by the gateway station, a kernel of the operating system have been **modified** so that the operating system:
 (a) **cannot forward any communications packets** from the private network to the potentially hostile network or from the potentially

1 hostile network to the private network

2 See e.g., ‘601 patent at 17:48-54. Fortinet, through its expert, attempts to construe the term
3 “modified” to mean “that the operating system kernel’s source code has been changed.”
4 ECF No. 230 at 23. However, this is not the construction that Fortinet advanced during the
5 claim construction phase of this litigation. To the extent that Fortinet seeks to limit the
6 construction of this term to require a static change in the source code, Fortinet’s
7 construction is wrong, and differs from its own construction that it previously disclosed.
8 Fortinet’s original construction was: “The core of an operating system that resides in
9 memory at all times, manages memory, and allocates system resources, has been altered.”
10 (See Kopeikin Dec. Ex. 16). As with the means-plus-function limitations, Fortinet is
11 seeking to improperly advance a new claim construction based on extrinsic evidence that
12 was never previously disclosed.

13 To support its new, previously undisclosed construction, Fortinet cites to the
14 following sections of the ‘601 patent specification:

- 15 • “Appendix A attached hereto is a printed listing of the modified source code in the
16 kernel.” ‘601 patent at 10:23-24;
- 17 • “The kernel of the operating system of the gateway station 14 is modified to disable
18 all IP forwarding, source routing and IP redirecting functions. It is therefore
19 impossible to have communication data packets flow directly through the gateway
20 station 14.” *Id.* at 7:64-8:1.

21 What Fortinet has done is insert limitations from the specification into the claims language.
22 This is impermissible. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326 (Fed. Cir.
23 2002) (citations omitted) (“The claims are interpreted in light of the specification [but that]
24 does not mean that everything expressed in the specification must be read into all the
25 claims.”). Moreover, the sections of the specification that Fortinet cites fall under the
26 heading “Detailed Description of The Preferred Embodiment.” Therefore, not only does
27 Fortinet’s construction read in limitations from the specification, but it incorporates
28 limitations from a preferred embodiment. *Innova/Pure Water*, 381 F.3d at 1117

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1 (“particular embodiments appearing in the written description will not be used to limit
2 claim language that has a broader effect.”); *Liebel-Flarsheim Co.*, 358 F.3d at 913 (“it is
3 improper to read limitations from a preferred embodiment described in the specification --
4 even if it is the only embodiment -- into the claims absent a clear indication in the intrinsic
5 record that the patentee intended the claims to be so limited.”).

6
7 A POSA reading the claims within the context of the specification would
8 understand that the ordinary meaning of the term modify is to change a portion of an
9 instruction so its interpretation as execution is altered; the modification may permanently
10 change the instruction or leave it unchanged and affect only the current execution. For
11 example, a kernel can be modified to operate in a certain manner through configuration
12 statements and does not need to have the code for the kernel rewritten to effect such a
13 modification. (AK Decl. ¶59). Also, a POSA who read the ‘601 patent would understand
14 that policies and code are interchangeable (and therefore constitute modifications); and
15 would understand that permitting packet forwarding limits the degree of security provided
16 by the firewall but does not materially alter the way the firewall operates with respect to
17 transparent proxies. *Id.*

18 2. The FortiOS Kernel Is Modified

19 Contrary to Fortinet’s assertions, the FortiOS kernel is modified so that packets
20 with a destination IP address other than the gateway *are not forwarded* from the private
21 network to the potentially hostile network or from the potentially hostile network to the
22 private network without processing by the gateway. (*See* AK Dec. at AK Report Exh. J at
23 53, ECF No. 235-8-13.) Fortinet’s 30(b)(6) witness, Mr. Crawford, testified that the
24 Accused Products use a modified Linux kernel. (*See* Crawford Dep. Tr. p.42:19-23). Mr.
25 Crawford further testified, and Dr. Keromytis confirmed, that the Linux kernel is written so
26 that the Accused Products will not perform any action with respect to a packet without a
27 policy. (*See* AK Dec. ¶57). Mr. Crawford further testified, and Dr. Keromytis confirmed,
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1 that when a user creates a policy the Linux kernel is further modified to implement that
2 policy. (*See* AK Dec. ¶58, *See also* Hicks Dep. Tr. p. 112:4-19).

3 While Fortinet provides no specific analysis of why its products do not infringe,
4 and again relies on conclusory arguments that NPS has failed to provide evidence to
5 support its infringement position, [REDACTED]
6 [REDACTED]

7 [REDACTED] However, as explained by Dr.
8 Keromytis, NAT does not simply forward communications from a client to a server. (*See*
9 AK Dec. ¶¶51-53) NAT is a process that prohibits the direct communication between the
10 client and server and modifies data packets. *Id.* As explained by Dr. Keromytis, the
11 presence of NAT in any of the Accused Products does not demonstrate that the Accused
12 Products do not have a modified kernel that “cannot forward any communications packets
13 from the private network to the potentially hostile network or from the potentially hostile
14 network to the private network.” (*See* AK Dec. ¶¶53-56) Regardless of what Fortinet raises
15 for the first time in its reply, there can be no dispute that Fortinet’s systems are built to
16 never allow connections/traffic through unless a policy instructs it to. *Id.*

17 Regardless, this issue is not appropriate to resolve on summary judgment, as even
18 Mr. Hicks admits that Dr. Keromytis’ conclusion that a kernel of the operating systems for
19 the Accused Products has been modified so that the operating system cannot forward any
20 communicating packets is a disputed fact. (Hicks Dep. Tr. 131:7-10)

21 **IV. CONCLUSION**

22 Accordingly, NPS requests that the Court deny Fortinet’s Motion in its entirety.
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1 Respectfully submitted,

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